GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

UNSTARRED QUESTION NO:3378
ANSWERED ON:22.03.2017
Availability of Uranium
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Will the Minister of ATOMIC ENERGY be pleased to state:

(a) whether the current annual production of Uranium in the country is enough to meet the annual fuel requirement of all the operational Uranium − based Nuclear Power Plants and if so, the details thereof;

(b) if not, the steps taken/being taken by the Governmentto explore alternative fuel/technologies/imported fuel for the said purpose;

(c) the details of uranium reserves and extraction potential in the country, State/UT-wise along with the details of the uranium extracted during each of the last three years, State/UT-wise;

(d) the details of domestic production and import of other nuclear minerals including Thorium and Rare Earth Minerals during the said period along with the steps taken by the Government to make the country self-reliant in aforementioned minerals; and

(e) whether the country is importing Uranium from other foreign countries and if so, the details thereof including the quantity of imported Uranium during the above period, country-wise?

Answer

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

(a)Yes, Sir. Out of 22 Nuclear reactors, presently in operation 8 reactors with aggregate capacity of 2400 MW are fuelled by indigenous Uranium. These
reactors are now being operated close to their rated capacity. 14 reactors with an aggregate capacity of 4380 MW are under IAEA Safeguards and use imported uranium.

(b)Does not arise.

(c)Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of Department of Atomic Energy (DAE), which has a mandate to identify and evaluate mineral resources of uranium, has so far established 2,48,786 tonne (t) in-situ U_3O_8 (2,10,971t U) as on February, 2017. State-wise details of the uranium resource are given below in different states as under :

State Uranium reserves
U_3O_8 (t) U (t)
Andhra Pradesh 1,22,691 1,04,042
Telangana 18,550 15,731
Jharkhand 64,392 54,604
Meghalaya 23,040 19,538
Rajasthan 9,421 7,989
Karnataka 4,682 3,970
Chhattisgarh 3,986 3,380
Uttar Pradesh 785 666
Uttarakhand 100 85
Himachal Pradesh784 665
Maharashtra 355 301
Total 2,48,786 2,10,971

The uranium deposits established by AMD are mined by Uranium Corporation of India Limited (UCIL), a Public Sector Undertaking (PSU) of Department of Atomic energy(DAE). The deposits at Jaduguda, Narwapahar, Bagjata, Bhatin, Banduhurang, Turamdih and Mohuldih in Jharkhand and Tummalapalle in Andhra Pradesh are currently under commercial exploitation by UCIL. It is not in the public interest to disclose the indigenous uranium extraction details.

(d)The domestic production of nuclear minerals including Thorium and Rare Earth Minerals during 2016-17 (till February 2017) is as follows:

Mineral Production in tonnes
Nuclear grade Ammonium Di-uranate (NGADU) 22.691

Thorium Nitrate (Commercial grade) 74
Lanthanum Carbonate (REO) 25.051
Cerium Carbonate (REO) 8.899
Neodymium-Praseodymium Oxalte (REO) 0.297
Samarium Oxalate (REO) 1.303

(e)Yes Sir. The country-wise details of imports of uranium are tabulated below:

Year	M/s.JSC TVEL Corporation, Russia	M/s. JSC NAC Kazatomprom , Kazakhstan	M/s.CAMECO, Canada
	Quantity (MT)	Quantity (MT)	Quantity (MT)
2013-14	296.31*	460#	-
2014-15	296.54*	283.4#	-
2015-16	303.78*	Nil	250.74# 42.15$

* Natural Uranium Oxide Pellets;
# Natural Uranium Ore Concentrate;
$ Enriched Uranium Oxide Pellets.
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